FW

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,707	01/22/2004	Masashi Tokuda	2271/71523	7647

7590 05/01/2007

Ivan S. Kavrukov, Esq.
Cooper & Dunham LLP
1185 Avenue of the Americas
New York, NY 10036

EXAMINER	
ZHU, RICHARD Z	

ART UNIT	PAPER NUMBER
2609	

MAIL DATE	DELIVERY MODE
05/01/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/763,707	TOKUDA, MASASHI	
	Examiner	Art Unit	
	Richard Z. Zhu	2609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-8 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-8 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 23 January 2004 is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 1/23/2004.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application JP 2003-015532 filed in Japan on January 24th of 2003. Certified copy of the Japanese Application had been received on January 23rd of 2004.

Claim Objections - 37 CFR 1.75

2. The following is a quotation of 37 CFR 1.75(a):

The specification must conclude with a claim particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention or discovery.

3. Claims 1 and 3 are objected to under 37 CFR 1.75(a) as failing to particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention or discovery.

Claim 1 recites " a data transmitting device operative to transmit linear data to the speaker via the silicon data access arrangement". There is a lack of antecedent basis for "the speaker" within the claim. Please amend it accordingly. Furthermore, Claim 1 recites "G3 facsimile communications via the ISDN", it is unclear to the examiner whether or not ISDN within the claim means "Integrated Services Digital Network" or some other definition and G3 as meaning "Group 3"? Please clarify on this subject matter. Furthermore, Claim 1 recites " said monitor being connected to the silicon....." whereas monitor is not a apparatus. The following interpretation is use for examination purpose "said monitoring device being connected to the silicon.....". Finally, please rewrite "vice a versa" explicitly in the form of proper claim language to clearly state what the applicant is attempting to claim. For examination purpose, "vice a versa" will be interpreted as "a signal converting device configured to convert a modem signal used in facsimile communications via the digital telephone line into a signal used in the analog telephone line".

Claim 3 recites "....the facsimile sending and reception data.....". There is a lack of antecedent basis for "the facsimile reception data" within Claim 2 or Claim 3. Is the facsimile

data of Claim 2 the equivalent of facsimile reception data of Claim 3? Please clarify and amend the claims accordingly.

Drawing Objections - 37 CFR 1.83

Figures 3, 4, and 5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-3 and 6 are rejected under 35 USC 103 (a) as being unpatentable over the teachings of Applicant Admitted Prior Art (***AAPA***) and ***Mardinian et al (US 6711245 B1)***.

Regarding Claim 1, AAPA discloses:

an analog interface (**Fig. 4, SW1 208**) formed from a silicon data access arrangement (**Page 4, lines 5-14, "silicon data access arrangement"**) operative to interface with an analog telephone line;

a digital interface (**Fig 4, ISDN Interface Section 203**) operative to interface with an ISDN line (**Fig. 4, ISDN Line 204**);

a signal converting device (**Fig 4, Codec 206**) configured to convert a modem signal used in facsimile communications via the analog telephone line into a signal used in the ISDN line (**Page 3, lines 11-20**); and a signal converting device (**Fig 4, Codec 202**) configured to convert a modem signal used in facsimile communications via the Integrated Service Digital Network line into a signal used in the analog telephone line (**Page 3, lines 21-28**).

a monitoring device (**Fig. 4, Codec 206 and Addition Amplifier 209**) configured to monitor a progress of G3 facsimile communications (**Page 3, lines 17-20**); said monitoring

device being connected to the silicon data access arrangement (**Page 4, lines 2-4 and Page 4, line 22 – Page 5, line 7**).

a data transmitting device operative to transmit linear data to the speaker (**Fig 4, Speaker 207 and see Page 3, lines 15-20**).

However, ***AAPA*** does not disclose that the monitoring device is configured to monitor a progress of G3 facsimile communication via the ISDN. ***Mardinian et al (US 6711245 B1)*** teaches a monitoring device that will enable the apparatus of ***AAPA*** monitoring of G3 communication via the ISDN when combined with ***AAPA***.

According to the applicant's disclosure, the problem that caused the apparatus of prior art to be incapable of monitoring a progress of G3 facsimile communication via the ISDN is that the signal, which was digitalized in order to be send through the ISDN, is purely digital and DAA has no provision to transmit said signal to the speaker (***APAA***, Page 5, lines 8-25) in order to be monitored. ***Mardinian et al (US 6711245 B1)*** **discloses a system in Figure 4 and Column 6, Rows 45-63, a DAA 410 that is configured with a provision to send audio signals in a digital format directly to the Audio System 406 and Speaker 407. Therefore, if the conventional system of the prior art adapts the system of *Mardinian* that comprises DAA 410, it would produce a compact apparatus that has the capability to monitor a progress of G3 signal that is being send through the ISDN because *Mardinian* teaches a system that can monitor an audio signal in a digital format and the capability to monitor a progress of G4 signal via analog telephone line because a G4 signal is already in full digital format before being converted and send via the analog telephone line.**

Therefore, it would've been obvious to one ordinarily skilled in the art at the time of the invention, to adapt the System 400 of ***Mardinian et al*** into the conventional facsimile apparatus of ***AAPA*** in order to provide a compact facsimile apparatus with the capability to monitor audio signals in full digital format, the format that the original G3 signal was converted into so that it may be deployed via the ISDN. The motivation that would drive one ordinarily skilled in the art to do so can be found in ***Mardinian et al*** "to have an improved method or system such that a modem may utilize the audio system of the host without extra costs" (***Mardinian***, Col 1, Rows 56-59).

Regarding Claim 2, ***APAA*** teaches a facsimile use modem apparatus according to Claim 1, wherein said linear data is formed from facsimile sending data and facsimile data **(Page 3, lines 17-20)**. The motivation and modification to combine the references are the same as recited in the rejection of Claim 1.

Regarding Claim 3, ***APAA*** teaches a facsimile use modem apparatus according to claim 2, further comprising a volume adjusting device configured to multiply each of the facsimile sending and reception data by a prescribed gain when a volume of the speaker is adjusted **(Page 3, lines 17-19. It is well known to all that speaker volume is adjusted by changing the gain of an input amplifier, Official Notice)**. The motivation and modification to combine the references are the same as recited in the rejection of Claim 1.

Regarding Claim 6, ***APAA*** discloses in Fig 5 a network control unit comprising a silicon data access arrangement and in Fig 4 a Speaker 207 and ISDN Interface Section 203. Given what was taught by ***Mardinian,*** an integrated and compact monitoring system that can monitor a progress of G4 signal, because it is already in digital format, via the analog

telephone line and a progress of G3 signal via the ISDN line, it would've been obvious to one ordinarily skilled in the art at the time of invention to make a NCU comprising a silicon data access arrangement, a speaker, and an ISDN Interface Section 203 in order to have a compact system that could minimize cost by utilizing a minimum amount of components and still meet the rigorous standards of digital communication.

6. Claims 4-5 and 7-8 are rejected under 35 USC 103 (a) as being unpatentable over the combined teachings of ***APAA, Mardinian et al (US 6711245 B1),*** and ***Averbuch et al. (US 5502752 A).***

Regarding Claim 4, the combination of ***APAA*** and ***Mardinian*** teach the elements of Claim 1 from which the above claims are dependent upon. However, the combination does not teach the elements of Claim 4.

Averbuch et al. (US 5502752 A) teaches a PSTN/ISDN 100 **(Fig. 1, PSTN/ISDN 100)** coupled to a mobile network **(Fig 1, MSC 105 and see Col 2, Rows 50-53)**, comprising a data canceling device **(Fig 4, Data Buffer 400 and see Col 4, Rows 3-4)** configured to cancel excessive facsimile communications data when a clock of the ISDN line is faster than that of the modem **(Col 4, Rows 8-14 "an entire bit deleted" and see Fig. 8 step 812)**.

Therefore, it would've been obvious to one ordinarily skilled in the art at the time of invention to adapt data buffer 400 to measure clock of ISDN line, as suggested by CLK1 of ***Averbuch***, and to measure clock of modem, as suggested by CLK2 of ***Averbuch***, in order to conform to the CCITT recommendation for V.110 framing, into the silicon data access arrangement based modem of ***APAA*** and ***Mardinian*** in order to provide "an apparatus that matches clock rates between independent networks" (***Averbuch***, Col 2, Rows 9-17).

Regarding Claim 5, ***Averbuch et al. (US 5502752 A)*** discloses that the apparatus further comprising a noise suppressing device **(Fig 4, Data Buffer 400 and see Col 4, Rows 3-4)** operative to suppress noises output by repeatedly using a previous data when the clock of the ISDN line is slower than that of the modem **(Col 4, Rows 14-24 "an entire bit is added..." and see Fig. 8 step 812)**.

However, ***Averbuch*** does not teach a speaker. The ***AAPA*** teaches the speaker (***Fig 4. Speaker 207***).

The modification of silicon data access arrangement based modem of ***AAPA*** and ***Mardinian*** and the motivation to combine ***Averbuch*** with ***AAPA*** and Mardinian is the same as recited in the rejection of Claim 4.

Regarding the facsimile with modem of Claim 7 dependent upon Claims 1-3 and 6, and Claim 7 dependent upon Claims 4 and 5, please refer to the rejection of Claim 1 on silicon data access arrangement based modem of the combined system of ***APAA*** and ***Mardinian*** as well as the rejection of Claim 4 on facsimile using modem apparatus that compensate for different clock rates whereas the motivation and modification to combine all references are the same as recited in the rejections of Claim 1 and Claim 4.

Regarding the network connecting the facsimile having the modem of Claim 8 dependent upon Claims 1-3, and 6, and Claim 8 dependent upon Claims 4 and 5, please refer to the ISDN/PTSN network as disclosed by ***APAA*** and ***Mardinian*** in the rejection of Claim 1 and the rejection of Claim 4 on facsimile using modem apparatus that compensate for different clock rates whereas the motivation and modification to combine all five references are the same as recited in the rejections of Claim 1 and Claim 4.

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: US 5142568 A which discloses the deployment of G3 communication via ISDN line and a system that can be modified by Mardinian to accomplish the same purpose and US 6181736 B1 which discloses a DAA directed connected to the speaker.
2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian P. Werner whose telephone number is 571-272-7401 and Richard Z. Zhu whose telephone number is 571-270-1587. The examiners can normally be reached on M-F, 8:00 - 4:30.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RZZ
4/25/2007

BRIAN WERNER
SUPERVISORY PATENT EXAMINER

Richard Z. Zhu
Assistant Examiner
Art Unit 2609